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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/605,066	06/28/2000	Constantine N. Manis	102362-003 US B4	6078

23526 7590 02/25/2004

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EXAMINER
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TSEGAYE, SABA

ART UNIT	PAPER NUMBER
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2662

12

DATE MAILED: 02/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/605,066

Applicant(s)

MANIS ET AL.

Examiner

Saba Tsegaye

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, **the first and the second one of a plurality of nodes and the communication path between the first node and the second node** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The disclosure is objected to because of the following informalities: Applicant is required to update the status of application S.N. 09/290,353, cited on page 1 (first paragraph), line 2, by indicating that it is now abandoned. Also applicant is required to correct the application S.N. 09/290,353, cited on the oath/declaration.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2662

In claim 1, line 4, it is not clear whether “a network” refers to the same network cited in line 1.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1-3, 7, 10, 14 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Yoshihara et al. (US 6,259,673).

Regarding claims 1 and 3, Yoshihara discloses, in Figs. 8-10, a method for transmitting data between nodes (A-J) on a network comprising the step of:

Selecting a communication path by examining throughput values stored at a first one of the plurality of nodes on a network from which a link is to be established to a second one of a

Art Unit: 2662

plurality of nodes, the throughput values indicating the reliability of a communication path between the first node and the second node (column 1, lines 15-54); and

analyzing unit error rates stored at the first node to determine a gear to use for communicating with the second node, the unit error rates indicating the historical error rate for communications transmitted from the first node to the second node (column 1, lines 15-54; column 2, lines 26-31).

Regarding claim 2, Yoshihara discloses the method further comprising the step of: analyzing unit error rates stored at the first node to determine a gear to use for communicating with the second node, the unit error rates indicating the historical error rate for communications transmitted from the first node to the second node (column 1, lines 15-54; column 2, lines 26-31).

Regarding claim 7, Yoshihara discloses, in Fig. 10, the method wherein each throughput value has a value of between zero and one (column 4, lines 30-35).

Regarding claim 10, Yoshihara discloses the method wherein a gear describes different communication rated for communicating between the first node and the second node, wherein the gears comprised of the data packet, the error correction rate and the speed of data communication (column 7, lines 8-18).

Art Unit: 2662

Regarding claims 14 and 15, Yoshihara discloses the method wherein the method is implemented using algorithm (column 7, line 34-column 8, line 66).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihara et al. in view of Galand et al (US 6,647,008).

Yoshihara discloses all the claim limitations as stated above, except for updating the throughput values stored at the node based on the throughput values broadcast by each one of the other nodes.

Galand teaches that network topology information is updated when new links are activated, new nodes added to the network, when links or nodes are dropped or when link loads change significantly (column 6, lines 33-55).

It would have been obvious to one ordinary skill in the art at the time the invention was made to add a method that updates the throughput values, such as suggested by Galand, to the method of Yoshihara in order to allow dynamic network reconfigurations without disrupting end users logical connection (column 6, lines 55-58).

Art Unit: 2662

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihara in view of Servais et al. (US 6,141,388).

Yoshihara discloses all the claim limitations as stated above, except for error rate calculated as a ratio of units known to have been received correctly by the receiving node vs. units known to have been received with CRC by the receiving node.

Servais teaches that a bit error rate is calculated based on comparison of corrected received signal and uncorrected signal (column 3, lines 31-38).

It would have been obvious to one ordinary skill in the art at the time the invention was made to add a method that calculates error rate based on a ratio of correctly received units and units with CRC, such as that suggested by Servais, to the system of Yoshihara in order to determine a number of bit errors in the received signal.

10. Claims 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihara et al. in view of Daggett et al. (US 5,553,072).

Yoshihara discloses all the claim limitations as stated above, except for a powrline network (as in claim 11) and a method is employed on a token ring (as in claim 9).

Regarding claim 9, Daggett teaches a communication methods and apparatus for media access control of a first node in a network includes a priority controller for providing a transmit authorization signal (claimed token ring) authorizing the first node to transmit to the network through a powerline communication medium (column 2, lines 45-67).

It would have been obvious to one ordinary skill in the art at the time the invention was made to utilized a token ring system, such as that suggested by Daggett, in a system disclosed by

Art Unit: 2662

Yoshihara for maintaining channel efficiency at a high level and in order to ensure any given node will be guaranteed access to the media within some deterministic time period.

Regarding claim 11, Daggett teaches a communication methods and apparatus in witch devices in multiple nodes communicate using a powerline carrier (column 4, lines 29-34).

It would have been obvious to one ordinary skill in the art at the time the invention was made to utilized a power line network, such as that suggested by Daggett, in a system disclosed by Yoshihara for providing an inexpensive means to communicate via pre-existing power lines between nodes/devices.

11. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihara in view of Yonge, III et al. (US 6,397,368).

Yoshihara discloses all the claim limitations as stated above, except for a gear for transmitting data having a lower payload-to-protection ratio.

Yonge teaches a transmitting network node communicating with a receiving network node over a data channel, and each of the nodes having a transmit portion and receive portion, the transmit portion in the transmitting network node can take advantage of information regarding recent channel conditions as reflected in the most up-to-date channel map for the channel produced by the receive portion of the receiving network node based on a prior data transmission to the receiving network node.

It would have been obvious to one ordinary skill in the art at the time the invention was made to add a method that transmit data having a lower payload-to-protection ratio, such as that



Art Unit: 2662

suggested by Yonge, to the method of Yoshihara in order to provide higher data transfer rate and guarantee quality of service.

***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Ouellette (US 5,691,715) discloses a method and apparatus for detecting fraudulent power line communicates signal.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saba Tsegaye whose telephone number is (703) 308-4754. The examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (703) 305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ST  
February 20, 2004

  
**JOHN PEZZLO**  
**PRIMARY EXAMINER**